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IP Basics: Managing Intellectual Property

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IP Basics: Managing Intellectual Property; Converting Intellectual Assets into Property

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I. Key Assets in the "New" Economy

The mouse and graphic interface were first commercialized on Macintosh computers. Yet, Steve Jobs is said to have derived both from the Alto computer developed by Xerox's Palo Alto Research Center. While Jobs became a billionaire, "Xerox completely failed to get into the personal computer business, missing one of the biggest business opportunities in history."[1]

Preferring to be more akin to Apple than to Xerox, firms are increasingly mindful that their most valuable assets are apt to be ideas and information instead of land, buildings and inventory. Not capable of being fenced in or locked up, intangible assets can be protected when they are converted into patents, copyrights, trademarks and trade secrets -- collectively intellectual property (IP). Such property was recently reported by the New York Times to "have assumed an enormous role in the economy."[2] In a similar vein, it has been estimated that about 75% of S&P 500 companies' value is in intangible assets and that some have vastly increased revenue by giving more attention to IP.[3]

Similar observations are increasingly common in what has been variously called the new economy, post-industrial age, cyber age or information age. Moreover, it has been said that effective management of intellectual assets "will be crucial to the bottom line... for all companies, even the old-economy ones...."[4]

II. Making the Most of Intellectual Property

Much attention has been given to differences among intellectual assets, capital and property. Consider trained employees and loyal customers, for example. Both may be regarded as important assets, but neither can be protected except under, e.g., trade secret and trademark law. One IP attorney recently called intellectual capital "the buzzword of the nineties" and stressed the need for his colleagues to understand how to identify, protect and use it "effectively to address strategic corporate objectives."[5] Because many IP attorneys already understand such things, however, the need seems more acute for general counsel who are more likely to be integrating key IP decisions into overall firm objectives.

IP is intangible, but the parallels to tangible property are many. Everything accurately called "property" represents alienable, divisible and legally enforceable rights. It is widely appreciated that underlying interests, differing as much as a square inch of Antarctica or a square mile of Manhattan, are very difficult to evaluate.[6] Yet, few seem to appreciate that IP interests themselves are not easily evaluated. Their worth spans the range between quit claim and warranty deeds -- both in comparing, say, patents with copyrights and in comparing the scope of different patents.

III. Alpha and Beta

This discussion can be more concrete if we contrast two hypothetical firms. Alpha, on one hand, faces

considerable direct competition in each of its product lines, but it is large and well-known. Beta, on the other, faces no direct competition for its one, new product, but it is small.

Both firms strive to be efficient and to sell ever-better products. Alpha invests about 1% of its receipts in R&D, but its consumer reputation allows an adequate mark-up. Beta's sunk and continuing R&D costs account for more than 25% of receipts. Although Beta had initial difficulty promoting its new product, sales are picking up.

From these facts, one could conclude that, trademarks or equivalent aside, IP is not critical to Alpha. Yet, if some of its innovations would be gladly licensed by others, it could increase income without expanding plant or equipment.[7] Serendipitous discoveries of minimal internal value are prime candidates, but an intangibles audit could identify others such as improvements in manufacturing processes, inventory control, customer communications and a host of other areas.

Beta's situation is very different. The light bulb epitomizes the great invention, but firms promoting electricity had to face large, well-established utilities. It took enormous effort and resources to displace gas for illumination (and refrigeration!).

While Beta, too, might benefit from licensing out, effective IP management is key to survival. Popular products attract competitors. Consumer goodwill associated with Beta's name is unlikely to generate margin adequate to compete with those who could copy without the need to recover R&D costs. The situation will be worse if prospective competitors also enjoy scale advantages. If others can sell at lower prices *and* make bigger profits, Beta is doomed.

IV. Overview of Options for Protecting Work Products

All firms must optimize trademark protection, but margins generated by brand-name recognition rarely support much R&D. The ability of trademark and trade dress protection to prevent copying of work products is also very limited. Designed to prevent source confusion, it cannot be used to block others from copying service and product innovations.[8]

In contrast, patents are highly effective in protecting a wide spectrum of innovative activities. Firms should not give away what can be sold. Conversely, they need not lock up things unlikely to be stolen, much less buy expensive locks,[9] and, as many appreciate, patents are expensive to obtain and enforce.

Evaluating income potential is the first step in seeking cost-effective IP, but innovators are at a disadvantage. They usually seek rights that *seem* worthwhile based on expectations. After markets mature, however, free riders have a much better idea of the potential return for evading or invalidating patents that stand in their way.[10]

Firms without data needed for informed cost-critical choices may think of IP as insurance. Comparing the full spectrum of actual and potential IP options is, thus, the second step in seeking cost-effective IP coverage. Important characteristics of each are sketched below.[11]

A. Copyrights

Although copyrights are indispensable in some industries, they have value across the board. Copyrights do not generally protect ideas or processes, software aside, but firms should take advantage of all they offer for, e.g., ads, manuals and webpages.[12] Costs are low, and remedies are essentially unmatched.

Copyright protection arises automatically in most countries, but works generated in the U.S. must generally be registered before suit can be filed here. The government fee is only $30.00, and the registration process is straight-forward. The term of protection, 95 years from the date of publication, exceeds most needs. Owners can obtain profits, actual damages, costs and injunctions. If applications are filed within three months of publication, egregious infringers may also be liable for attorney fees and statutory damages up to $150,000.[13]

However, independent contractors usually retain copyrights. While rights in employees' work belongs to their employers, firms that have, e.g., web sites created by outsiders should get assignments. Otherwise, expensive work may have to be redone when changing contractors.

B. Trade Secrets

Trade secret protection is useful and available in all industries for any kind of information that need not be published to fully exploit its commercial value. If reasonable measures are taken to preserve secrecy, rights in customer lists and a full range of other competitively useful information arise upon initial creation.

Unlike patent and copyright law, which is federal, trade secret rights are mostly determined by state law. Industrial espionage and breaches of duties of confidentially are forbidden, but reverse engineering (working backward from products obtained in the marketplace) is not. Also, some states take a dim view of asserted rights that interfere with employee mobility.

Damages, profits and injunctions for trade secret misappropriation are automatically available, but protection is not free. Obvious costs include employee education and security (restricting access to premises and documents). Less obvious costs include monitoring publications, trade show presentations and government inspectors.

C. Patents

The main advantage of patents is explained in a leading Supreme Court opinion:

While trade secret law does not forbid the discovery of the trade secret by fair and honest means..., patent law operates "against the world," forbidding any use of the invention for whatever purpose for a significant length of time. The holder of a trade secret also takes a substantial risk that the secret will be passed on to his competitors... in a manner not easily susceptible of discovery or proof. Where patent law acts as a barrier, trade secret law functions relatively as a sieve.[14]

When technology is covered by patents, firms have less need to worry about security or departing employees -- much less, exposing it to potential licensees.

The worth of patents (in contrast with the value of protected technologies) is determined by the scope of their claims. Like deeds, claims set the metes and bounds of protected territory. Claim scope is negotiated with the U.S. Patent and Trademark Office (PTO) in a process called "prosecution."

Failing to secure adequate patent protection when it is needed is penny-wise and pound-foolish. Conversely, claims of inadequate scope are a waste of money, as are patents secured in the wrong countries. Before further consideration of ways to cope, it will be useful to address several matters of importance.

V. Basic Propositions.

Most high-level corporate employees, particularly lawyers, need to understand a few things about patents.

A. Time-sensitive issues

Inventions must not be commercially exploited or disclosed without at least considering the possibility of patents. U.S. law allows one year,[15] but most countries do not allow patents on applications filed after any commercial use or disclosure.

Applications must be filed abroad, assuming they are not time barred, within a year to get the benefit of U.S. filing dates. The date can be critical; other countries award patents on competing inventions to the first to file.

Finally, the availability of trade secrets as an alternative was recently reduced. Firms could once wait until the very last moment to decide whether claim scope warranted a patent. If secrecy was viable, making a patent likewise difficult to enforce, one might decide to rely on secrecy. Now, most applications will be published "promptly" after 18 months.[16]

B. Searches

Patent searches are needed to avoid infringement, but they are also needed to determine whether applications are worth filing. Patent examiners search to determine whether claims are patentable, but preparing and filing a patent application is surely the most expensive way to get a search. Further, because examiners spend modest amounts of time on each application, for example, official searches may leave prior art (patents and other literature) for infringers later to discover and use to invalidate patents.

Moreover, the lower an applicant's awareness of prior art, the higher the risk that, e.g., claim scope must be narrowed during prosecution. That possibility deserves separate discussion.

C. Compromising claim scope

Applicants who can overcome PTO rejections by narrowing claims may find that more attractive than, say, filing multi-tiered appeals. Yet, anyone facing the choice must weigh potentially serious consequences. Under the doctrine of equivalents, claims sometimes exceed their literal scope, but patentees cannot obtain in litigation, territory given up to have disputed claims allowed.[17] With such traps for the unwary, it is critical to understand that applications worth filing are worth the expense of skilled preparation and prosecution.

D. Maintenance Fees

Finally, it should be understood that most countries, including the U.S., require escalating patent maintenance fees.[18] How long should firms pay them despite, e.g., lagging sales? If Europe is not now an important market, will it be later? What of Japan or other countries? As with deciding whether to file at all, lawyers should be involved. Yet, these are not "legal" decisions.

VI. Meeting the Need

Few variables are more likely to dictate short and long-term commercial success than the adequacy of protection for intellectual assets. The smaller the firm, the bigger the need.

Most are careful to avoid IP infringement and are eager to sue direct competitors who do not. Many firms also educate key employees on their roles in perfecting and protecting intangible assets. Fewer give full attention to IP.[19] For example, those who would not hesitate to monitor and sue infringing competitors may not monitor non-competitors as potential licensees.[20]

To make the most of IP options, many factors, e.g., legal, technical marketing and sales, must be weighed.[21] Strategic IP management must therefore be multi-disciplinary. Essentially all senior personnel should be involved, but who will take the lead?

Some firms now have Chief Knowledge Officers,[22] but training and integration is important. Counsel for firms considering the creation of such a position should try to ensure that it is staffed by someone who understands the difference between assets and property -- not to mention the comparative advantages and disadvantages of various kinds of IP.

1. Jason Krause, *Will Xerox Shut the PARC?* The Industry Standard, Oct. 20, 2000 (visited Aug. 12, 2008).

2 Sabra Chartrand, *Patents: How Do You Put a Price on Intellectual Property?* The New York Times, Dec. 18, 2000.

3. Ellen Rodgers & Alan Ratliff, *How to Launch a Successful IP Management Strategy,* ACCA Docket, Nov./Dec. 2000 (licensing income increased from $3 billion to $100 billion between 1980 and 1997). *See also,* Julie L. Davis and Suzanne S. Harrison, Edison in the Boardroom, 71-77 (2001) (more data of the same kind).

4. Roundtable, *Boost Your Client's Intellectual Capital IQ,* Corp. Legal Times, Oct. 2000, at 104.

5. Michael E. Melton, *Transforming Intellectual Capital into Strategic Corporate Assets,* in Handling Intellectual Property Issues in Business Transactions, 414 (PLI Feb. 2001).

6. *See, e.g.,* Wayne S. Upton, Jr., Business and Financial Reporting, Challenges from the New Economy, Special Report, Financial Accounting Series, (Fin'l Acctg. Stds. Bd. 2001) (no consensus on ways to value such assets), online at <www.fasb.org/sr_new_economy.pdf> (visited Aug. 12, 2008).

7. *See* citations *supra* note 3.

8. *See, e.g.,* TrafFix Devices Inc. v. Marketing Displays Inc., 532 U. S. 23 (2001).

9. *See* 35 U.S.C. sec. 41 and the PTO website (visited Aug. 12, 2008). Besides (utility) patents that most people think of when the term is used, the U.S. offers design patents (for the ornamental features of things such as chairs and refrigerators) and plant patents. Only utility patents are considered here.

10. Invalidity and non-infringement are standard defenses in all types of IP litigation.

11. For more detail, *see* Intellectual Property: The Practical and Legal Fundamentals.

12. *See, e.g.,* Copyright on the Internet, 17(3) Corp. C.Q., July 2001, at 1.

13. *See, e.g.,* Columbia Pictures Television, Inc. v. Krypton Broadcasting of Birmingham, Inc., 259 F.3d 1186 (9th Cir. 2001) (affirmed a statutory damage award of $31.68 million), *cert. den. sub nom.* Feltner v. Columbia Pictures Television, Inc., 122 S.Ct. 1063 (2002).

14. Kewanee Oil Co. v. Bicron Corp., 416 U.S. 470, 490 (1974).

15. *See* 35 U.S.C. sec. 102(b). *See also,* Pfaff v. Wells Electronics Inc., 525 U.S. 55 (1998).

16. *See* 35 U.S.C. sec. 122. Such publication can be avoided if no application is filed abroad.

17. *See* Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., 122 S. Ct. 1831 (2002).

18. Again, *see* the PTO website (as of Oct. 1, 2001, maintenance fees due 3.5, 7.5 and10.5 years after issue are $880, $2020 and $3100, respectively, but smaller entities pay half of that).

19. *See* Edison in the Boardroom, *supra* note 3. The authors assign firms to a five-level hierarchy said to represent IP management sophistication.

20. *See, e.g.,* Andrew J. Sherman, *A Checklist for Due Diligence Issues when Acquiring Technology Targets,* M & A Lawyer, Sept. 2001, at 12 (stressing the need to determine whether a prospective acquisition monitors infringement, for example).

21. *See, e.g.,* Gerald G. Udell et al., Guide to Invention and Innovation Evaluation (University of Oregon, 1977) (discusses 33 factors to consider; the very last question is: "Can the inventor legally exclude others?"). *See also,* Clayton M. Christensen, *The Rules of Innovation,* Technology Review, June 2002, at 33, which encapsulates his excellent book, The Innovator's Dilemma (2000).

22. David Skyrme Assoc., Do You Need a CKO? (visited Aug. 12, 2008).